

An aerial photograph showing a large area of flooding. A multi-lane road curves through the water, with some houses and trees visible on the banks. The water is a murky brown color, and the sky is overcast.

## A Bright Future for Roads and Sustainability

# Emerging issues for Road Construction & Maintenance - A Futuristic View

## Key Messages

1. emerging issues for roads
2. second generation of environmental reporting
3. changes to business as usual

## Emerging Issues for Road Construction and Maintenance – A Futuristic View



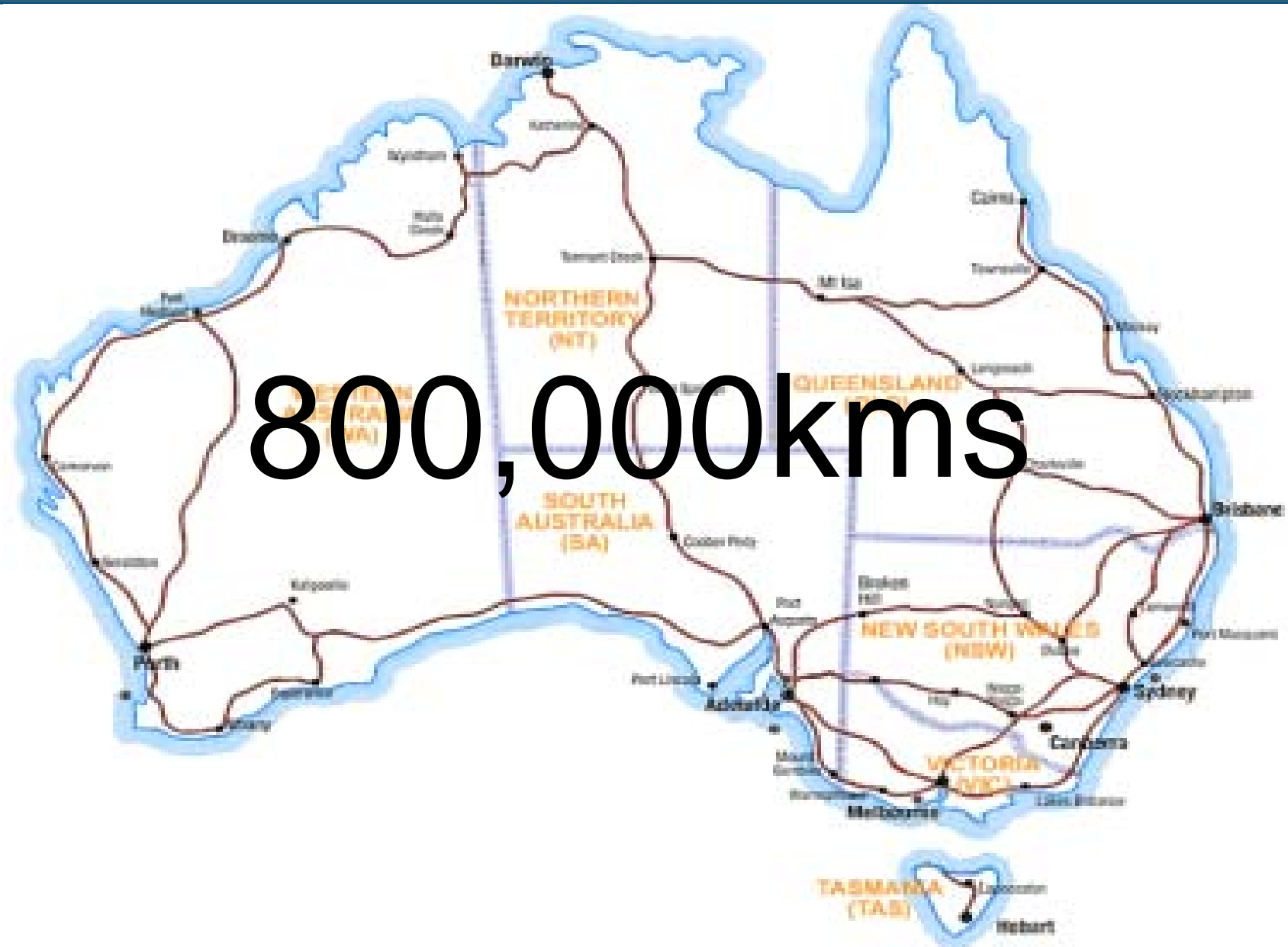
Central Western Region (Barcaldine) QLD, January 2011

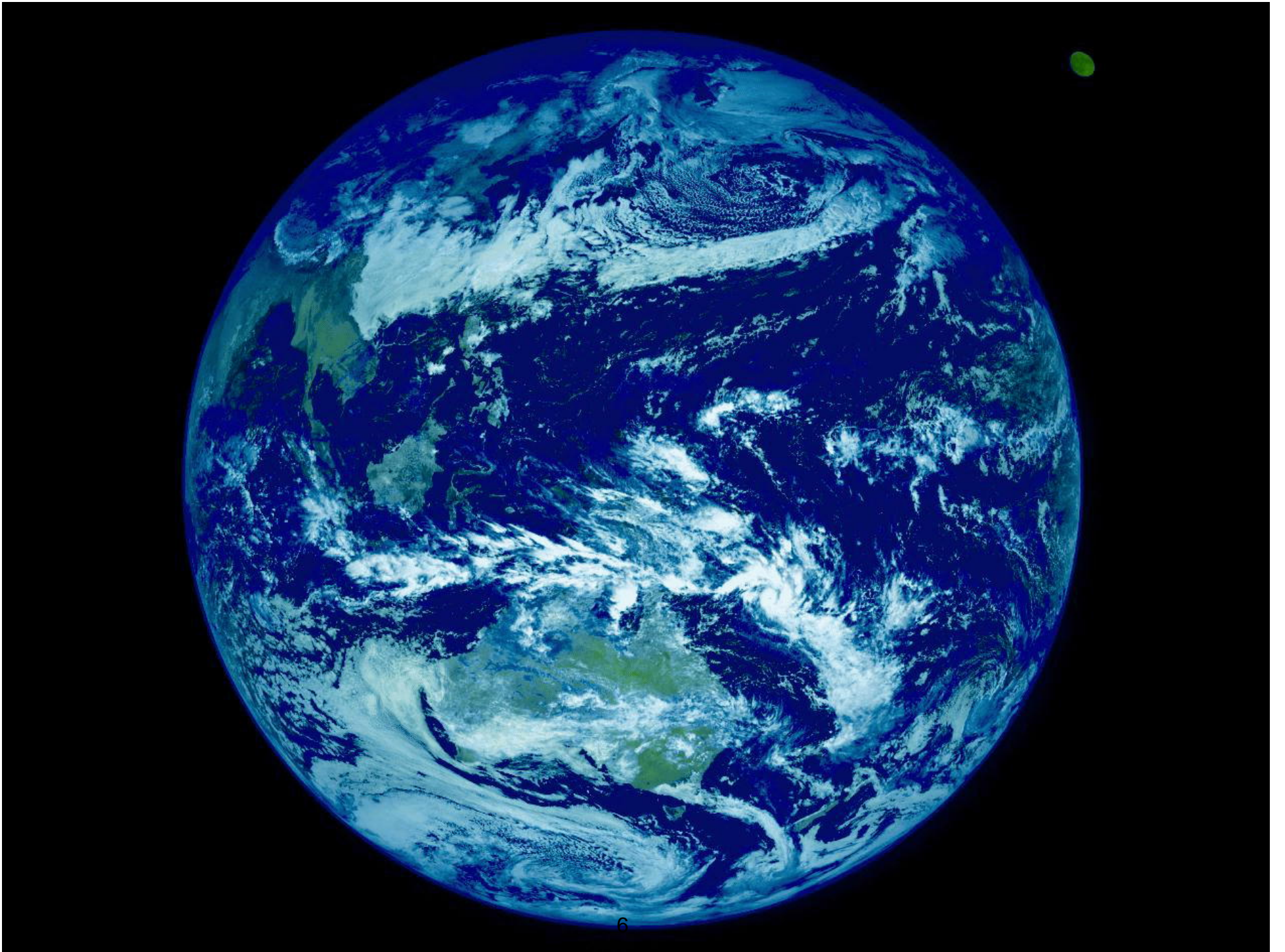
## Emerging Issues for Road Construction and Maintenance – A Futuristic View



Central Western Region (Barcaldine) QLD, January 2011

## Emerging Issues for Road Construction and Maintenance – A Futuristic View







Build your way out of congestion?

## Future Pressures – Emerging Issues

- **Climate change**
- Oil Price
- **Community action**
- Resource access and scarcity
- **Population**
- Road freight increase
- Maintenance costs
- **Skills shortage**
- Water scarcity
- **Carbon price**
- Rapid urbanisation and densification
- **Extreme weather events**

Workshop 2011 WA and QLD



# Inherent Efficiency of Road Construction



## Inherent Efficiency of Road Construction

- balancing earthworks
- stabilising aids to adapt local marginal material
- local environment managed and revegetated
- road water runoff capture and treatment
- optimising pavement thickness for conditions and loads
- effective scheduling of associated capital expenditure and rapid delivery





Sustainable  
**Built Environment**  
National Research Centre



Innovation Underpinning Australia's Infrastructure and Building Industry

# Research Program 1: Greening the Built Environment

1-1 Performance of Green Buildings

**1-3 The Future of Roads**

1-5 Biophilic Urbanism



**Sustainable  
Built Environment**  
National Research Centre



**Queensland Government**  
Department of Transport and Main Roads



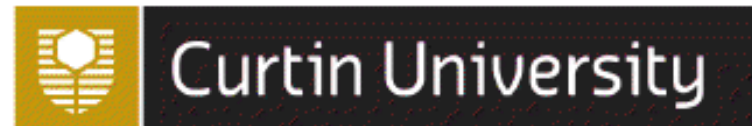
Department of Treasury and Finance  
Building Management Works  
Office of Strategic Projects



**Queensland Government**  
Department of Public Works



**Queensland Government**  
Infrastructure and Planning



**The Road Ahead -  
The will be changes to business as usual.**

